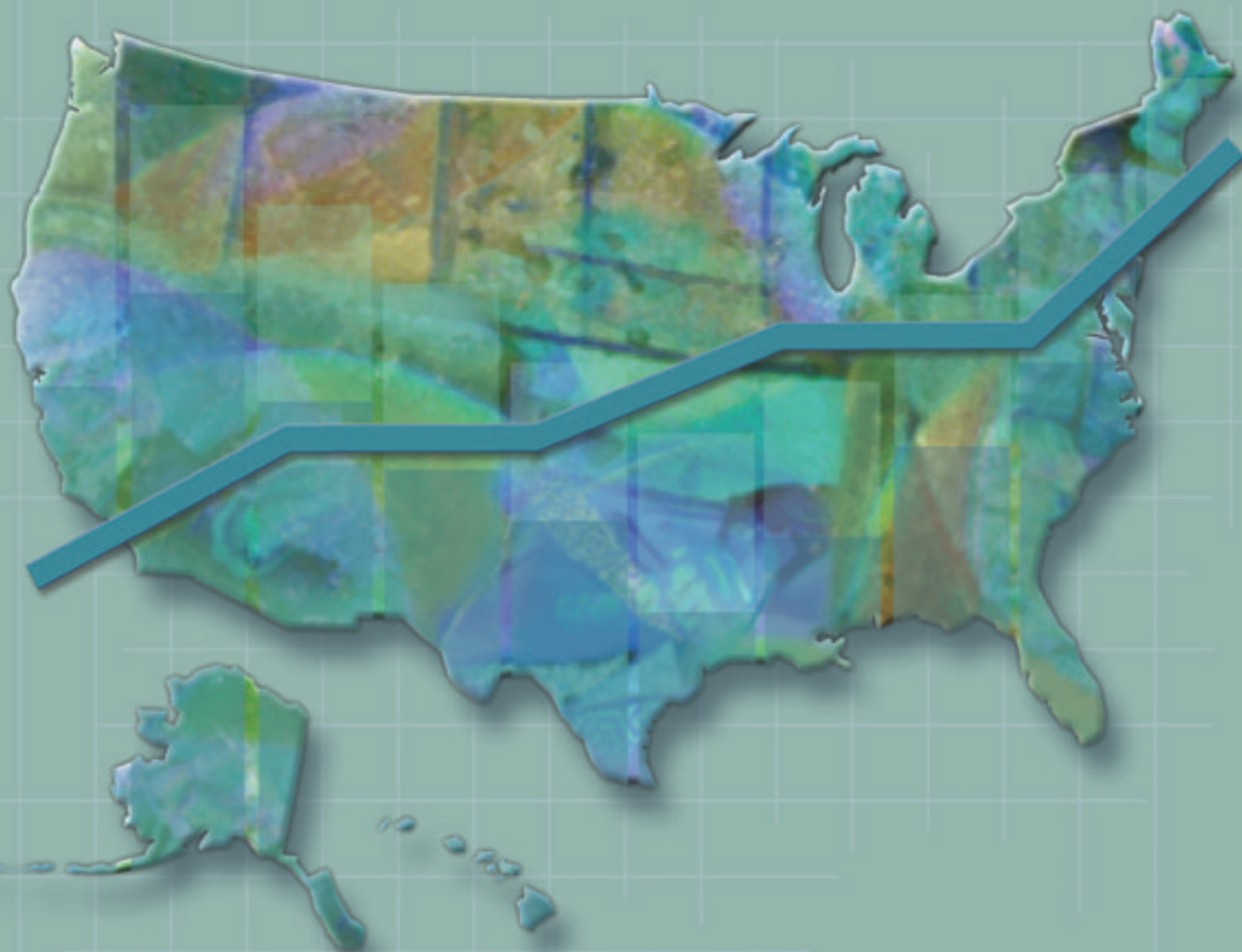


Health, United States, 2005

with Chartbook on Trends in the Health of Americans



U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Centers for Disease Control and Prevention
National Center for Health Statistics

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Suggested Citation

National Center for Health Statistics
Health, United States, 2005
With Chartbook on Trends in the Health of Americans
Hyattsville, Maryland: 2005

Library of Congress Catalog Number 76-641496
For sale by Superintendent of Documents
U.S. Government Printing Office
Washington, DC 20402

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Preface

Health, United States, 2005 is the 29th report on the health status of the Nation and is submitted by the Secretary of the Department of Health and Human Services to the President and Congress of the United States in compliance with Section 308 of the Public Health Service Act. This report was compiled by the National Center for Health Statistics (NCHS), Centers for Disease Control and Prevention (CDC). The National Committee on Vital and Health Statistics served in a review capacity.

The *Health, United States* series presents national trends in health statistics. Each report includes an executive summary, highlights, a chartbook, trend tables, extensive appendixes, and an index.

Chartbook

The fourth *Chartbook on Trends in the Health of Americans* updates and expands information from previous chartbooks and introduces this year's special feature on adults 55–64 years of age, a rapidly growing segment of the adult population. The economic and health status of this age group is of interest as the majority of its members are poised to enter retirement and to become eligible for Medicare. The chartbook assesses the Nation's health by presenting trends and current information on selected determinants and measures of health status and utilization of health care. Determinants of health considered in the chartbook include demographic factors, poverty, health insurance coverage, and health behaviors and risk factors, including obesity, cigarette smoking, and physical activity. Additional risk factors this year include teen seat belt use, drinking and driving, and multiple cardiovascular risk factors for adults. Measures of health status include prevalence of asthma attacks in children, headache and lower back pain in adults, limitation of activity due to chronic health conditions, and several measures of mortality. A new section on health care utilization includes use of mammography and Pap tests, visits to physician offices and outpatient departments, injury-related visits by children to emergency departments, and insertion of cardiac stents—an increasingly common hospital procedure for treatment of coronary artery disease, particularly for older persons. Many measures are shown separately for persons of different ages because of the strong effect of age on health. Selected figures also highlight differences in determinants and

measures of health status and utilization of health care by such characteristics as sex, race, Hispanic origin, education, and poverty status.

Trend Tables

The chartbook section is followed by 156 trend tables organized around four major subject areas: health status and determinants, health care utilization, health care resources, and health care expenditures. A major criterion used in selecting the trend tables is availability of comparable national data over a period of several years. The tables present data for selected years to highlight major trends in health statistics. Earlier editions of *Health, United States* may present data for additional years that are not included in the current printed report. Where possible, these additional years of data are available in Excel spreadsheet files on the *Health, United States* Web site. Tables with additional data years are listed in Appendix III.

Racial and Ethnic Data

Many tables in *Health, United States* present data according to race and Hispanic origin consistent with Department-wide emphasis on expanding racial and ethnic detail when presenting health data. Trend data on race and ethnicity are presented in the greatest detail possible after taking into account the quality of data, the amount of missing data, and the number of observations. New standards for Federal data on race and ethnicity are described in Appendix II under *Race*.

Education and Income Data

Many tables in *Health, United States* present data according to socioeconomic status, using education and poverty level as proxy measures. Poverty level is based on family income data and number of persons in the household. Data are presented in the greatest detail possible after taking into account the quality of data, the amount of missing data, and the number of observations. Due to the complexity and sensitivity of collecting education and income information, only a few national data systems obtain data on education and income, including the National Health Interview Survey (NHIS), the National Health and Nutrition Examination Survey, and the National Survey of Family Growth. Education and

income are obtained directly from survey respondents, and nonresponse rates, especially for income data, are particularly high. NCHS imputes missing family income data for the NHIS starting with data year 1990, and tables with NHIS data shown in *Health, United States* utilize the imputed poverty data. Education and income information are not generally available from records-based data collection systems including the National Health Care Surveys (see Appendix I). State vital statistics systems currently report mother's education on the birth certificate and, based on information from an informant, decedent's education on the death certificate. See Appendix II, *Education; Family income; Poverty level*.

Changes in This Edition

Each volume of *Health, United States* is prepared to maximize its usefulness as a standard reference source while maintaining its continuing relevance. Comparability is fostered by including similar trend tables in each volume. Timeliness is maintained by (1) adding new tables each year to reflect emerging topics in public health and (2) improving the content of ongoing tables. *Health, United States, 2005* includes eight new trend tables on multiple births (table 5) based on birth certificate data; prevalence of respiratory conditions (table 56), headache and low back pain (table 57), hearing and vision limitations (table 59), leisure-time physical activity (table 72), and adult vaccinations (table 76), all based on National Health Interview Survey data; the nutritional status of the U.S. population based on National Health and Nutrition Examination Survey data (table 71); and factors that affect growth in personal health care expenditures (table 121) based on data from the Centers for Medicare & Medicaid Services.

Appendixes

Appendix I describes each data source used in the report and provides references for further information about the sources. Data sources are listed alphabetically within two broad categories: (1) Government Sources and (2) Private and Global Sources.

Appendix II is an alphabetical listing of terms used in the report. It also presents standard populations used for age adjustment (tables I, II, and III); ICD codes for causes of death shown in *Health, United States* from the Sixth through Tenth Revisions and the years when the Revisions were in effect (tables IV and V); comparability ratios between ICD-9

and ICD-10 for selected causes (table VI); ICD-9-CM codes for external cause-of-injury, diagnostic, and procedure categories (tables VII, IX, and X); industry codes according to the 2002 North American Industry Classification System (table VIII); National Drug Code (NDC) Therapeutic Class recodes of generic analgesic drugs (table XI); and sample tabulations of NHIS data comparing the 1977 and 1997 Standards for Federal data on race and Hispanic origin (tables XII and XIII).

Appendix III lists tables for which additional years of trend data are available electronically in Excel spreadsheet files on the *Health, United States* Web site and CD-ROM, described below under Electronic Access.

Index

The Index to Trend Tables and Chartbook Figures is a useful tool for locating data by topic. Tables are cross-referenced by such topics as Child and adolescent health; Elderly population age 65 years and over; Women's health; Men's health; State data; American Indian, Asian, Black, and Hispanic origin populations; Education; Poverty status; Disability; and Metropolitan and nonmetropolitan data.

Electronic Access

Health, United States may be accessed in its entirety on the World Wide Web at www.cdc.gov/nchs/hus.htm. From the *Health, United States* Web site, one may also register for the *Health, United States* electronic mailing list to receive announcements about release dates and notices of updates to tables.

Health, United States, 2005, the chartbook, and each of the trend tables are available as Acrobat .pdf files on the Web. Chartbook figures are available as downloadable PowerPoint® slides. Trend tables and chartbook data tables are available as downloadable Excel spreadsheet files. Trend tables listed in Appendix III include additional years of data not shown in the printed report or .pdf files. Both .pdf and spreadsheet files for selected tables will be updated on the Web if more current data become available near the time when the printed report is released. Readers who register with the electronic mailing list will be notified of these table updates. Previous editions of *Health, United States* and chartbooks, starting with

the 1993 edition, also may be accessed from the *Health, United States* Web site.

Health, United States is also available on CD-ROM, where it can be viewed, searched, printed, and saved using Adobe Acrobat software on the CD-ROM.

Copies of the Report

Copies of *Health, United States, 2005*, and the CD-ROM can be purchased from the Government Printing Office (GPO) through links to GPO on the National Center for Health Statistics Web site, Publications and Information Products page.

Questions?

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Acknowledgments

Overall responsibility for planning and coordinating the content of this volume rested with the Office of Analysis and Epidemiology, National Center for Health Statistics (NCHS), under the direction of Amy B. Bernstein and Diane M. Makuc.

Production of *Health, United States, 2005*, highlights, trend tables, and appendixes was managed by Kate Prager. Trend tables were prepared by Amy B. Bernstein, Alan J. Cohen, Margaret A. Cooke, La-Tonya D. Curl, Catherine R. Duran, Sheila Franco, Virginia M. Freid, Ji-Eun Lee, Andrea P. MacKay, Mitchell B. Pierre, Jr., Rebecca A. Placek, Kate Prager, Laura A. Pratt, and Henry Xia, with assistance from Stephanie N. Gray. Appendix II tables and the index were assembled by Anita L. Powell. Production planning and coordination of trend tables were managed by Rebecca A. Placek. Administrative and word processing assistance were provided by Carole J. Hunt, Lillie C. Featherstone, and Brenda L. Wolfrey.

Production of the *Chartbook on Trends in the Health of Americans* was managed by Virginia M. Freid. Production of the Special Feature on Adults 55–64 Years of Age was managed by Amy B. Bernstein. Data and analysis for specific charts were provided by Amy B. Bernstein, Margaret A. Cooke, Sheila Franco, Virginia M. Freid, Deborah D. Ingram, Ellen A. Kramarow, Ji-Eun Lee, Andrea P. MacKay, Patricia N. Pastor, and Kate Prager. Graphs were drafted by La-Tonya D. Curl and data tables were prepared by Rebecca A. Placek. Technical assistance and programming were provided by Lara Akinbami, Alan J. Cohen, Catherine R. Duran, Lois Fingerhut, Richard F. Gillum, Mitchell B. Pierre, Jr., Henry Xia, and Marc W. Zodet.

Publications management and editorial review were provided by Demarius V. Miller. Oversight review for publications and electronic products was provided by Linda L. Bean. The designer was Sarah Hinkle. Production was done by Jacqueline M. Davis and Zung T. Le. Printing was managed by Patricia L. Wilson and Joan D. Burton.

Electronic access through the NCHS Internet site and CD-ROM were provided by Christine J. Brown, Jacqueline M. Davis, Dorothy Day, Zung T. Le, Demarius V. Miller, Sharon L. Ramirez, and Patricia L. Wilson.

Data and technical assistance were provided by staff of the following NCHS organizations: *Division of Health Care Statistics*: Irma E. Arispe, Catharine W. Burt, Donald K.

Cherry, Carol J. DeFrances, Marni J. Hall, Esther Hing, Lola Jean Kozak, Karen L. Lipkind, Linda F. McCaig, Robert Pokras, Susan M. Schappert, Jane E. Sisk, and Genevieve W. Strahan; *Division of Health Examination Statistics*: Lisa Broitman, Margaret D. Carroll, Bruce Dye, and Clifford L. Johnson; *Division of Health Interview Statistics*: Patricia F. Adams, Veronica E. Benson, Barbara Bloom, Viona I. Brown, Margaret L. Cejku, Pei-Lu Chiu, Robin A. Cohen, Richard H. Coles, Marcie Cynamon, Achintya Dey, Cathy C. Hao, Kristina Kotulak-Hays, Susan S. Jack, Jane B. Page, Eve Powell-Griner, Jeannine Schiller, Charlotte A. Schoenborn, Mira L. Shanks, Anne K. Stratton, and Luong Tonthat; *Division of Vital Statistics*: Robert N. Anderson, Elizabeth Arias, Anjani Chandra, Thomas D. Dunn, Brady E. Hamilton, Donna L. Hoyert, Kenneth D. Kochanek, Marian F. MacDorman, Joyce A. Martin, Gladys M. Martinez, T.J. Mathews, Arialdi M. Minino, William D. Mosher, Sherry L. Murphy, Gail A. Parr, Manju Sharma, Stephanie J. Ventura, and Jim Weed; *Office of Analysis and Epidemiology*: Mark S. Eberhardt, Lois Fingerhut, Deborah D. Ingram, Richard J. Klein, and Patricia A. Knapp; and *Office of International Statistics*: Juan Rafael Albetorio-Diaz and Francis C. Notzon.

Additional data and technical assistance were also provided by the following organizations of the Centers for Disease Control and Prevention: *Epidemiology Program Office*: Samuel L. Groseclose and Patsy A. Hall; *National Center for Chronic Disease Prevention and Health Promotion*: Joy Herndon, Sherry Everett Jones, Laura K. Kann, Steve Kinchen, Shari L. Shanklin, and Lilo T. Strauss; *National Center for HIV, STD, and TB Prevention*: Melinda Flock and Luetta Schneider; *National Immunization Program*: Natalie J. Darling and Meena Khare; by the following organizations within the Department of Health and Human Services: *Agency for Healthcare Research and Quality*: David Kashihara and Steven Machlin; *Centers for Medicare & Medicaid Services*: Cathy A. Cowan, Cherron A. Cox, Frank Eppig, Denise F. Franz, David A. Gibson, Deborah W. Kidd, Helen C. Lazenby, Katharine R. Levit, Anna Long, Joanne S. Mack, Anne B. Martin, and Carter S. Warfield; *National Institutes of Health*: Jessica Campbell, Catherine C. Cowie, and Lynn A. G. Ries; *Office of the Secretary, DHHS*: Mitchell Goldstein; *Substance Abuse and Mental Health Services Administration*: Daniel Foley, Joseph C. Gfroerer, and Ronald Manderscheid; and by the following governmental and nongovernmental organizations: *U.S. Bureau of the Census Bureau*: Joseph Dalaker and Bernadette D. Proctor; *Bureau of Labor Statistics*: Alan Blotin, Stella Cromartie, Kay Ford, Daniel Ginsburg,

Elizabeth Rogers, John Stinson, and Peggy Suarez;
Department of Veterans Affairs: Michael F. Grindstaff; *Alan
 Guttmacher Institute*: Rebecca Wind; *American Association of
 Colleges of Pharmacy*: Jennifer M. Patton; *American
 Association of Colleges of Podiatric Medicine*: Carol E. Gill;

American Dental Education Association: Richard Weaver;
Association of Schools of Public Health: Mah-Sere K. Sow;
Cowles Research Group: C. McKeen Cowles; and *InterStudy*:
 Richard Hamer.

All those associated with *Health, United States* would like to give their special thanks to

Dr. Kate Prager

who is retiring this year. In her capacity as Special Assistant for *Health, United States* for the past 13 years, Dr. Prager's painstaking review of everything from the validity of the content to the formatting of footnotes has ensured that all aspects of the book are accurate and accessible. She has performed the work of analyst, technical editor, manager, government liaison, and every other possible role involved in producing a book of this scope and has done so with skill, dedication, and patience. We would like to express our gratitude for all she has contributed to the publication over the years and wish her well in her post-*Health, United States* life. She will be greatly missed.

Contents

Preface	iii
Acknowledgments	vi
List of Chartbook Figures	xii
List of Trend Tables	xiv

Executive Summary and Highlights

Executive Summary	3
Highlights	8
Health Status and Determinants	8
Health Care Utilization and Health Care Resources	13
Health Care Expenditures and Payors	15
Special Feature: Adults 55–64 Years of Age	18

Chartbook on Trends in the Health of Americans

Population	20
Age	21
Race and Ethnicity	22
Poverty	24
Health Insurance and Expenditures	28
Health Insurance	28
Health Care Expenditures	30
Health Risk Factors	32
Tobacco Use	32
Teenagers and Cars	36
Physical Activity	38
Overweight and Obesity	42
Morbidity and Limitation of Activity	44
Asthma in Children Age 3–17	44
Headache and Low Back Pain	46
Limitation of Activity: Children	48
Limitation of Activity: Working-Age and Older Adults	50
Health Care Utilization	54
Mammography	54
Pap Smear	56
Injury-Related Emergency Department Visits Among Children and Adolescents	58
Visits to Physician Offices and Hospital Outpatient Departments	60
Hospital Procedures: Cardiac Stents	62

Mortality	64
Life Expectancy	64
Infant Mortality	66
Leading Causes of Death for All Ages	68
Special Feature: Adults 55–64 Years of Age	70
Introduction	70
Employment Status	72
Low Income	74
Health Insurance Coverage	76
Cardiovascular Risk Factors	78
Use of Health Care Services	80
Blood Glucose Regulators and Cholesterol-Lowering Drugs Prescribed During Medical Visits	82
Total Health Care Expense and Prescribed Medicine Expense	84
References	86
Technical Notes	94
Data Tables for Figures 1–37	95

Trend Tables

Health Status and Determinants	127
Population	127
Fertility and Natality	132
Mortality	155
Determinants and Measures of Health	230
Utilization of Health Resources	281
Ambulatory Care	281
Inpatient Care	324
Health Care Resources	341
Personnel	341
Facilities	351
Health Care Expenditures and Payors	359
National Health Expenditures	359
Health Care Coverage and Major Federal Programs	379
State Health Expenditures and Health Insurance	403

Appendixes

Contents	423
I. Sources of Data	427
II. Definitions and Methods	475
III. Additional Data Years Available	522
Index to Trend Tables and Chartbook Figures	525

Executive Summary

Health, United States, 2005, is the 29th annual report on the health status of the Nation prepared by the Secretary of the Department of Health and Human Services for the President and Congress. In a chartbook and 156 detailed tables, it provides an annual picture of health for the entire Nation. Trends are presented in health status and health care utilization, resources, and expenditures.

For those entrusted with safeguarding the Nation's health, monitoring the health of the American people is an essential step in making sound health policy and setting priorities for research and programs. Measures of the population's health provide essential information for assessing how the Nation's resources should be directed to improve the health of the population. Examination of emerging trends identifies diseases, conditions, and risk factors that warrant study and intervention. *Health, United States* presents trends and current information on measures and determinants of the Nation's health. It also identifies differences in health and health care among people of differing races and ethnicities, genders, education and income levels, and geographic locations, and it shows whether these differences are narrowing or increasing. Given the increasing diversity of the Nation and the continuing changes in the health care infrastructure, this is a challenging task, but it is a critically important undertaking.

Overall Health of the Nation

The health of the Nation continues to improve overall, in part because of the significant resources devoted to public health programs, research, health care, and health education. Over the past century many diseases have been controlled or their morbidity and mortality substantially reduced. Notable achievements in public health have included the control of infectious diseases such as typhoid and cholera through decontamination of water; implementation of widespread vaccination programs to eradicate or contain polio, diphtheria, pertussis, and measles; fluoridation of water to drastically reduce the prevalence of dental caries; and improvements in motor vehicle safety through vehicle redesign and efforts to increase use of seatbelts and motorcycle helmets (1). A sharp decline in deaths from cardiovascular disease is a major public health achievement that resulted in large part from public education campaigns emphasizing a healthy lifestyle

and increased use of cholesterol and hypertension-lowering medications (2). Yet even as progress is made in improving both the quantity and quality of life, increased longevity is accompanied by increased prevalence of chronic conditions and their associated pain and disability. In recent years, progress in some arenas—declines in infant and cause-specific mortality, morbidity from chronic conditions, reduction in prevalence of risk factors including smoking and lack of exercise—has not been as rapid as in earlier years or trends have been moving in the wrong direction. It is equally important to keep in mind that these improvements have not been equally distributed by income, race, ethnicity, education, and geography.

Health Status and Its Determinants

Life expectancy in the United States continues to show a long-term upward trend, although the most dramatic increases were in the early part of the 20th century. In 2003 American men could expect to live 3 years longer, and women more than 1 year longer, than they did in 1990. Infant mortality and mortality from heart disease, stroke, and cancer continued to decline in recent years (figures 26, 27, 29, and tables 22, 27, and 29). In 2002 the infant mortality rate in the United States increased for the first time since 1958; preliminary data indicate a small, but not statistically significant, decline in 2003 (3,4).

Childhood infectious diseases such as mumps and measles have all but disappeared (table 51), but the prevalence of many chronic diseases is increasing in part associated with increased longevity and aging of the population (figure 1 and table 1). In 1999–2002, more than 9 percent of persons 20 years of age and over and about one-fifth of adults 60 years and over had diabetes, including those with diabetes previously diagnosed by a physician and those with undiagnosed diabetes determined by results of a fasting blood sugar test (table 55). A substantial proportion of the population also experiences discomfort from conditions such as arthritis, headache, and back pain, which can affect quality of life. In 2003, 15 percent of adults suffered with severe headache or migraine during the past 3 months (figure 17 and table 57). Nearly twice as many adults reported low back pain (figure 17 and table 57).

Of particular concern in recent years has been the increase in overweight and obesity, which are risk factors for many chronic diseases and disabilities including heart disease,

hypertension, and back pain. The rising number of children and adolescents who are overweight, and the high percentage of Americans who are not physically active (figures 13–15 and tables 72–74) raise additional concerns about Americans' future health (5).

Decreased cigarette smoking among adults is a prime example of a trend that has contributed to overall declines in mortality. However, the rapid drop in cigarette smoking in the two decades following the first Surgeon General's Report in 1964 has slowed in recent years. About 24 percent of men and 19 percent of women were current smokers in 2003 (figure 10 and table 63).

Prevalence of risky behaviors has also improved over time, including the percent of high school students in grades 9–12 who rode with a driver who had been drinking alcohol. This statistic decreased from 40 percent to 30 percent between 1991 and 2003, yet further reductions are certainly necessary (figure 12) (6).

Health Care Utilization and Resources

People use health care services for many reasons: to treat illnesses, injuries, and health conditions; to prevent or delay future health care problems; to reduce pain and increase quality of life; and to obtain information about their health status and prognoses. The study of trends in health care utilization provides important information on these phenomena and spotlights areas that warrant further study. Utilization trends may also be used to project future health care needs and expenditures, as well as training and supply needs.

Admissions to hospitals and length of stay declined substantially in the 1980s and 1990s, but these declines appear to be leveling off (tables 97–99). The diagnoses recorded on inpatient hospital stays are changing, as are the procedures performed on inpatients (table 100).

Hospitalizations for procedures that can be performed on an outpatient basis, such as lens extractions and knee arthroscopies, have all but disappeared from inpatient settings. Instead, inpatient care is becoming more intensive and complex, with more procedures such as insertions of cardiac stents and hip replacements being performed, particularly on older persons (figure 25 and table 100). In addition to changes in the location of services, the types of services being provided have changed. In particular, the number of drugs prescribed or administered during visits to

physicians and hospital outpatient departments is increasing (table 92).

Americans are increasingly using many types of preventive or early-detection health services. Since the late 1980s the percentages of older adults who had received pneumococcal and influenza vaccine have increased sharply but remain below desired levels (table 76). The percentage of children 19–35 months of age vaccinated for many childhood infectious diseases is at a high level (81 percent), and the percentage of children receiving varicella (chickenpox) vaccine has increased sharply since it was first recommended in 1996 (table 77). Rates of Pap smears and mammograms have increased since 1987 when national data first became regularly available (figures 21, 22, and tables 86 and 87).

As the nature of health care changes, so do the supply of health providers and the sites where services are provided. Services that historically were provided in inpatient settings are increasingly offered in outpatient settings, and the number of physical therapy providers, comprehensive outpatient rehabilitation facilities, and ambulatory surgical centers certified by the Centers for Medicare & Medicaid Services has increased since the 1980s (table 117). As a result of this shifting in the sites of care, the supply of some other providers or service sites has declined, such as the number of inpatient mental health organizations and the associated number of beds (table 113).

Expenditures and Health Insurance

The United States spends more on health per capita than any other country, and health spending continues to increase rapidly. Much of this spending is for care that controls or reduces the impact of chronic diseases and conditions affecting an aging population. Prescription drugs and cardiac operations are two notable examples. In 2003 national health care expenditures in the United States totaled \$1.7 trillion, a 7.7 percent increase from 2002 (table 119). Since 1995 the average annual rate of increase for prescription drug expenditures was higher than for any other type of health expenditure (table 122), indicating the growing importance of prescription drugs. The source of payment for personal health care varies according to the type of care provided. In 2003, government sources were the primary payers of hospital and nursing home care, paying for about three-fifths of these types of services, while private health insurance paid for

almost one-half of physician services and prescription drugs (table 123).

Access to health care is determined by many factors, including the supply of providers and the ability to use and pay for available care. The percent of the population under 65 years of age with no health insurance coverage fluctuated about 16–18 percent between 1994 and 2003 (figure 6 and table 134). The percent of the population with private health insurance decreased between 1999 and 2003 (figure 6 and table 132). This decrease was offset by an increase in Medicaid coverage (table 133), resulting in little change in the percentage uninsured. Employer-sponsored health insurance in particular has been declining in recent years. Between 2001 and 2003 the proportion of the population under 65 years of age with health insurance obtained through the workplace (a current or former employer or union) declined from 67 to 63 percent (table 132).

Disparities in Risk Factors, Access, and Utilization

Efforts to improve Americans' health in the 21st century will be shaped by important changes in demographics. Ours is a Nation that is growing older and becoming more racially and ethnically diverse. In 2004 nearly one-third of adults and about two-fifths of children were identified as black, Hispanic, Asian, or American Indian or Alaska Native. Fourteen percent of Americans in 2004 identified themselves as Hispanic, 12 percent as black, and 4 percent as Asian (figure 3).

Health, United States, 2005, identifies major disparities in health and health care that exist by socioeconomic status, race, ethnicity, and insurance status. Persons living in poverty are considerably more likely to be in fair or poor health and to have disabling conditions, and less likely to have used many types of health care. In 2003 adults living in poverty were almost twice as likely to report having trouble seeing—even with eyeglasses or contact lenses—as higher income persons (table 59), and were also almost twice as likely to report having had an asthma attack in the past year (table 56). Non-Hispanic black children 3–10 years of age had higher asthma attack prevalence rates than non-Hispanic white or Hispanic children, and this disparity has been increasing in recent years (figure 16).

Large disparities in infant mortality rates remain among racial and ethnic groups (figure 28 and table 19). The gap in life

expectancy between the black and white populations has narrowed, but persists (table 27). Disparities in risk factors, access to health care, and morbidity also remain. Hispanic and American Indian persons under 65 years are more likely to be uninsured than those in other racial and ethnic groups (table 134). Obesity, a major risk factor for many chronic diseases, varies by race and ethnicity (tables 73 and 74). In 2003 the rate of recent mammogram screening for white and black women was similar but rates for Asian and Hispanic women remained at a lower level (figure 21 and table 86).

Many aspects of the health of the Nation have improved, but the health of some racial and ethnic groups has improved less than others. The large differences in health status by race and Hispanic origin documented in this report may be explained by factors including socioeconomic status, health practices, psychosocial stress and resources, environmental exposures, discrimination, and access to health care (7). Socioeconomic and cultural differences among racial and ethnic groups in the United States will likely continue to influence future patterns of disease, disability, and health care use.

Special Feature: Adults 55–64 Years of Age

The population group age 55–64 years is projected to be the fastest growing segment of the adult population over the next decade. In 2004 there were about 29 million persons in this age group. The 55–64 age group is projected to increase by 11 million persons over the 2004–2014 period (figure 30), to 40 million persons by 2014. “Baby boomers” are those born during the post-World War II period, between 1946 and 1964. In 2004 the oldest baby boomers were 55–58 years of age, and just beginning to enter the 55–64 year age group. Many more boomers will age into the group in the next 10 years. In future decades the population age 65 years and over will increase dramatically—yet the population age 55–64 years will not decline because more boomers will replace the ones that age into older age groups. Focusing on this age group may provide insight into program and policy interventions that could improve access and quality of care for Americans age 55–64 years as well as highlight implications for the Medicare program as this large group ages into Medicare and Social Security. This year's *Chartbook on Trends in the Health of Americans* includes a Special Feature focusing on health care use and expenditures for adults age 55–64 years of age, and

determinants of care including employment status, income, health insurance, and risk factors.

People age 55–64 years often have more frequent and more severe health problems than younger people. The prevalence of diabetes, hypertension, heart disease, and other chronic diseases increases with age (tables 55 and 69). There is also evidence that prevalence of some risk factors associated with heart disease—hypertension and obesity—has been increasing among this group while the prevalence of elevated cholesterol has declined (figure 34). Between 1988–94 and 1999–2002, the percent with at least one of these heart disease risk factors increased for men age 55–64 years from 64 to 72 percent and remained steady for women at 73–75 percent. Utilization of prescription drugs for these conditions has increased substantially. Between 1995–96 and 2002–03 the rate of cholesterol-lowering drugs prescribed during physician and hospital outpatient department visits among men 55–64 years of age almost tripled and among women increased more than three-fold (figure 36). Increasing drug utilization overall also has economic implications. The average annual expenses for all prescription drugs and out-of-pocket expenses for drugs increased substantially between 1997 and 2002 for this group (2002 dollars; figure 37).

Americans age 55–64 years are more likely to have health insurance coverage than younger adults age 18–54 (table 134). However as they grow older and begin to develop health problems, they do not have the guarantee of health insurance coverage that Medicare offers to almost all older adults age 65 years and over. Those still employed may delay retirement plans and continue to work in order to maintain health insurance coverage for themselves or their spouses until they reach age 65. In 2002–03 more than one-half of adults 55–64 years of age were employed with 17 percent retired and 12 percent unemployed due to disability (data table for figure 31).

Uninsured 55–64 year-olds may be at risk for high out-of-pocket expenditures, or of delaying or not receiving needed nonurgent care. Persons 55–64 years of age without health insurance were considerably less likely to have health care visits in the past year than persons with private insurance. About one-half of the uninsured 55–64 year-olds saw a general physician (family medicine practitioner, internist, or general practitioner) at least once in the past year compared with 80 percent of those with private insurance (figure 35). When the uninsured 55–64 year-olds do become

eligible for Medicare, they may use more health care resources as a result of health care that was delayed at earlier ages (8).

Many Americans age 55–64 years are relatively well off; however certain subgroups including unmarried persons, women, and minorities are at a greater risk of living in poverty, lacking health insurance, and being disabled (data tables for figures 31–33). Among both men and women 55–64 years of age, non-Hispanic black and Hispanic adults were about twice as likely to be living in poverty as non-Hispanic white adults in 2003. Levels of disability reported as a reason for unemployment were also higher among non-Hispanic black men and particularly among non-Hispanic black women age 55–64 years than among other racial and ethnic groups (figure 31). Those without health insurance or adequate income are particularly vulnerable to the financial and physical burdens of disease and disability.

To improve the health of all Americans and to enable policymakers to chart future trends, target resources most effectively, and set program and policy priorities, it is critical that the Nation keep collecting and disseminating reliable and accurate information about all components of health, including current health status, the determinants of health, resources, and outcomes. The following highlights from *Health, United States, 2005 With Chartbook on Trends in the Health of Americans* summarize the latest findings gathered from across the public and private health care sectors to help the Department of Health and Human Services, the President, and Congress in carrying out this essential mission.

References

1. Ten great public health achievements—United States, 1900–1999. MMWR 48(12):241–3. 1999. Available at www.cdc.gov/mmwr/preview/mmwrhtml/00056796.htm accessed on February 18, 2005.
2. Achievements in Public Health, 1900–1999: Decline in deaths from heart disease and stroke—United States, 1900–1999. MMWR 48(30):649–56. 1999. Available at www.cdc.gov/mmwr/preview/mmwrhtml/mm4830a1.htm accessed on June 1, 2005.
3. MacDorman MF, Martin JA, Mathews TJ, Hoyert DL, Ventura SJ. Explaining the 2001–2002 infant mortality increase: Data from the linked birth/infant death data set. National vital statistics reports; vol 53 no 12. Hyattsville, Maryland: National Center for Health Statistics. 2005. Available at www.cdc.gov/nchs/data/nvsr/nvsr53/nvsr53_12.pdf accessed on March 3, 2005.

4. Hoyert DL, Kung H, Smith BL. Deaths: Preliminary data for 2003. National vital statistics reports; vol 53 no 15. Hyattsville, Maryland. National Center for Health Statistics. 2005. Available at www.cdc.gov/nchs/data/nvsr/nvsr53/nvsr53_15.pdf accessed on March 3, 2005.
5. Flegal KM, Carroll MD, Ogden CL et al. Prevalence and trends in obesity among U.S. adults, 1999–2000. JAMA 288(14):1723–7. 2002.
6. Centers for Disease Control and Prevention, Surveillance summaries. Youth risk behavior surveillance—United States, 2003. MMWR 53(SS02):1–96. 2004. Available at www.cdc.gov/mmwr/preview/mmwrhtml/ss5302a1.htm accessed on March 3, 2005.
7. Williams DR, Rucker TD. Understanding and addressing racial disparities in health care. Health Care Financing Review 21(4):75–90. 2000.
8. McWilliams JM, Zaslavsky AM, Meara E, Ayanian JZ. Impact of Medicare coverage on basic clinical services for previously uninsured adults. JAMA 290(6):757–64. 2003.

Highlights

Health, United States, 2005, is the 29th report on the health status of the Nation. In a chartbook and 156 trend tables, it presents current and historic information on the health of the U.S. population. The trend tables are organized around four major subject areas: health status and determinants, health care utilization, health care resources, and health care expenditures and payors. The 2005 Chartbook on Trends in the Health of Americans focuses on selected determinants and measures of health and includes a special feature on adults 55–64 years of age, a rapidly growing segment of the adult population. The economic and health status of this age group is of interest as it is poised to enter retirement and to become eligible for Medicare. Highlights of the featured topic, adults age 55–64 years, follow other major findings from the report.

Health Status and Determinants

Population characteristics

Demographic changes in the U.S. population will shape future efforts to improve health and health care. Two major changes are the increasing racial and ethnic diversity of the Nation and the growth of the older population.

From 1950 to 2004 the proportion of the **population age 75 years and over** rose from 3 to 6 percent. It is projected that by 2050, 12 percent, or about one in eight Americans, will be 75 years of age or over (figure 2).

The **racial and ethnic composition** of the Nation has changed over time. The Hispanic population and the Asian population have grown more rapidly than other racial and ethnic groups in recent decades. In 2004, 14 percent of the U.S. population identified themselves as Hispanic and 4 percent as Asian (figure 3).

In 2003, 12.5 percent of Americans were living in **poverty**, up from 12.1 percent in 2002 and 11.7 percent in 2001. In 2003 more than 60 percent of black and Hispanic children under 18 years of age and more than one-half of the black and Hispanic population age 65 years and over were poor or near poor (figures 4 and 5 and table 2).

Fertility

Birth rates for teens continued their steady decline while birth rates for women 25–44 years of age increased in 2003.

The **birth rate for teenagers** declined for the 12th consecutive year in 2003, to 41.6 births per 1,000 women age 15–19 years, the lowest rate in more than six decades. The birth rate for 15–17 year olds in 2003 was 42 percent lower than the recent peak in 1991, and the birth rate for older teens 18–19 years of age was 25 percent lower than in 1991 (table 3).

In 2003 the **fertility rate** for Hispanic women (96.9 births per 1,000 Hispanic women 15–44 years) was 66 percent higher than for non-Hispanic white women (58.5 per 1,000) (table 3).

In 2003 the **birth rate for unmarried women** increased to almost 45 births per 1,000 unmarried women age 15–44 years. The birth rate for unmarried black women was essentially unchanged at 66.3 per 1,000 in 2003, and the birth rate for unmarried Hispanic women increased for the fifth year in a row to 92.2 per 1,000 (table 10).

The rate of **triplet and higher order births** at 187.4 per 100,000 live births in 2003 has been relatively stable since 1998, but was over 400 percent higher than the rate in 1980. The increase in multiple births was most marked among women 30 years of age and over (table 5).

Health Behaviors and Risk Factors

Health behaviors and risk factors have a significant effect on health outcomes. Cigarette smoking increases the risk of lung cancer, heart disease, emphysema, and other respiratory diseases. Overweight and obesity increase the risk of death and disease as well as the severity of disease. Regular physical activity lessens the risk of disease and enhances mental and physical functioning. Heavy and chronic use of alcohol and use of illicit drugs increase the risk of disease and injuries.

The percent of **adults who smoke cigarettes** continues to decline. Between 1990 and 2003, the percent of men who smoked declined from 28 to 24 percent and the percent of women who smoked declined from 23 to 19 percent (figure 10).

Between 1997 and 2003 the percent of **high school students who reported smoking cigarettes** in the past

month declined from 36 percent to 22 percent, reversing an upward trend that began in the early 1990s. Despite these declines, 26 percent of high school seniors were current smokers in 2003 and 13 percent smoked cigarettes on 20 or more days in the past month (figures 10 and 11).

Cigarette smoking during pregnancy is a risk factor for poor birth outcomes such as low birthweight and infant death. In 2003 the proportion of mothers who smoked cigarettes during pregnancy declined to less than 11 percent, down from 20 percent in 1989. The smoking rate during pregnancy for mothers age 18–19 years (17 percent) remained higher than that for older mothers (figure 10 and table 12).

Low birthweight is associated with elevated risk of death and disability in infants. In 2003 the low birthweight rate (less than 2,500 grams, or 5.5 pounds, at birth) increased to 7.9 percent, up from 7.0 percent in 1990 (table 13).

In 2003, 22 percent of male high school students rarely or never **used a seat belt** compared with 15 percent of female high school students. The percent of high school students in grades 9–12 who **rode with a driver who had been drinking alcohol** decreased from 40 percent to 30 percent between 1991 and 2003 (figure 12).

In 2003, 67 percent of **high school students** reported **regular physical activity**. Seventy-three percent of male high school students and 60 percent of female high school students reported regular physical activity. Only 50 percent of non-Hispanic black female students were physically active on a regular basis (figure 13).

In 2003, one-third of **adults** 18 years of age and over engaged in **regular leisure-time physical activity**. Nonpoor adults were more likely to engage in regular leisure-time physical activity (37 percent) than near poor or poor persons (23–25 percent). About one-half of poor and near poor adults were inactive compared with less than one-third of nonpoor adults (percents are age adjusted) (figure 14 and table 72).

Between 1971–74 and 1999–2000, the average energy intake in **kilocalories** (Kcals) increased 7 percent among men 20–74 years of age and almost 22 percent among women 20–74 years. For both men and women, the percent of Kcals from fat decreased while the percent of Kcals from carbohydrates increased (table 71).

The prevalence of **overweight and obesity among adults** 20–74 years of age increased from 47 percent in 1976–80 to 65 percent in 1999–2002. During this period the prevalence of

obesity among adults 20–74 years of age doubled from 15 to 31 percent (percents are age adjusted) (figure 15 and table 73).

Between 1976–80 and 1999–2002 the prevalence of **overweight among children** 6–11 years of age more than doubled from 7 to 16 percent and the prevalence of overweight among **adolescents** 12–19 years of age more than tripled from 5 to 16 percent (figure 15 and table 74).

In 2003 among current drinkers age 18 years and over, 40 percent of men and 20 percent of women reported drinking **five or more alcoholic drinks** on at least 1 day in the past year (age adjusted). This level of alcohol consumption was most common among young adults 18–24 years of age. Nearly 60 percent of young men and 42 percent of young women consumed five or more alcoholic drinks in a day (table 68).

In 2003 the prevalence of **illicit drug use** within the past month among youths 12–17 years of age was 11 percent. The percent of youths and young adults reporting illicit drug use increased with age, from 4 percent among 12–13 year olds to 19 percent among those age 16–17 years and 20 percent among those 18–25 years (table 66).

Morbidity

Summary measures of morbidity presented in this report include limitation of activity due to chronic health conditions, limitations in activities of daily living, and self-assessed (or family member-assessed) health status. Additional measures of morbidity include the incidence and prevalence of specific diseases, vision and hearing trouble, injury-related emergency department use, and suicide attempts.

In 2003 the percent of persons reporting their **health status** as fair or poor was more than three times as high for persons living below the poverty level as for those with family income more than twice the poverty level (20 percent and 6 percent, age adjusted). Levels of fair or poor health were nearly twice as high among Hispanic persons and non-Hispanic black persons as among non-Hispanic white persons (table 60).

In 2003 **limitation of activity** due to chronic health conditions was reported for 7 percent of **children** under the age of 18 years. Among preschool children (under 5 years) the conditions most often mentioned were speech problems, asthma, and mental retardation or other developmental

problems. Among school-age children (5–17 years), learning disabilities and Attention Deficit Hyperactivity Disorder (ADHD) were frequently mentioned (figure 18 and table 58).

Arthritis and other musculoskeletal conditions were the leading cause of **activity limitation** among **working-age adults** 18–64 years of age in 2002–03. Mental illness was the second most frequently mentioned condition causing activity limitation among adults 18–44 years of age and the third most frequently mentioned among adults 45–54 years (figure 19).

Among **persons age 65 years and over**, arthritis, and heart disease and other circulatory conditions were the two most frequently reported causes of **activity limitation** in 2002–03. The next most commonly reported cause of activity limitation was diabetes for those 65–84 years and vision problems and senility for those 85 years and over (figure 20).

In 2003, 9 percent of the adult population reported trouble seeing even with contact lenses or glasses and 3 percent were deaf or reported a lot of trouble hearing. **Vision and hearing trouble** increase with age. Twenty-one percent of persons age 75 years and over had trouble seeing and 15 percent were deaf or had a lot of trouble hearing (table 59).

In 2003, 15 percent of adults age 18 years and over reported **severe headache or migraine** during the past 3-month period. Severe headaches and migraines were more common among women than men (21 percent compared with 9 percent, age adjusted) and declined with age from 25 percent among women age 18–44 years to 7 percent among women age 75 years and over (figure 17 and table 57).

In 2003, 28 percent of adults age 18 years and over reported **low back pain** lasting a day or more in the last 3-month period. Women had higher prevalence of low back pain than men (figure 17 and table 57).

In 2003 **tuberculosis** incidence declined for the 11th consecutive year to 5.2 cases per 100,000 population, down from 10.3 in 1990 and 12.3 in 1980 (table 51).

New **pediatric AIDS cases** have declined steadily since 1994 when U.S. Public Health Service guidelines recommended testing and treatment of pregnant women and neonates to reduce perinatal HIV transmission. The vast majority of pediatric AIDS cases occur through perinatal exposure. In 2003, an estimated 59 new AIDS cases occurred among

children under the age of 13 years, compared with an estimated 187 cases in 1999 (table 52).

Incidence rates for **all cancers combined** declined in the 1990s for males but not for females. Between 1990 and 2001 age-adjusted cancer incidence rates declined on average nearly 1 percent or more per year for black males, non-Hispanic white males, American Indian or Alaska Native males, and Asian or Pacific Islander males. Among non-Hispanic white females cancer incidence increased on average 0.4 percent per year between 1990 and 2001, a significant increase (table 53).

The most frequently diagnosed **cancer sites in males** are prostate, followed by lung and bronchus, and colon and rectum. Cancer incidence at these sites is higher for black males than for males of other racial and ethnic groups. In 2001 age-adjusted cancer incidence rates for black males exceeded those for white males by 50 percent for prostate, 49 percent for lung and bronchus, and 16 percent for colon and rectum (table 53).

Breast cancer is the most frequently diagnosed cancer among females. Breast cancer incidence is higher for non-Hispanic white females than for females in other racial and ethnic groups. In 2001 age-adjusted breast cancer incidence rates for non-Hispanic white females exceeded those for black females by 33 percent, for Asian or Pacific Islander females by 52 percent, and for Hispanic females by 74 percent (table 53).

In 1999–2002, 9.3 percent of adults 20 years of age and over had **diabetes**. Thirty percent of adults with diabetes were undiagnosed in 1999–2002, similar to the percent in 1988–94 (table 55).

In 2003, about 3 percent of **adults** age 18 years and over and 6 percent of **children** age 3–17 years had an **asthma attack** during the past 12-month period (figure 16 and table 56).

In 2003 among **adults** age 18 years and over, 14 percent reported being diagnosed with **sinusitis** and 9 percent with **hay fever**. Women were more likely than men to report these diagnoses (table 56).

Between 1993 and 2003 the percent of high school students who reported attempting suicide (8–9 percent) and whose **suicide attempts** required medical attention (just under 3 percent) remained fairly constant. Girls were more likely than boys to consider or attempt suicide. However, in 2002

adolescent boys (15–19 years of age) were five times as likely to die from suicide as were adolescent girls, in part reflecting their choice of more lethal methods, such as firearms (tables 46 and 62).

The prevalence of **serious psychological distress** was 3 percent in 2002–03 among civilian noninstitutionalized adults 18 years of age and over. Four percent of persons age 45–54 years had serious psychological distress, more than younger and older age groups. Persons living below the poverty line were more than four times as likely as those above 200 percent of poverty to have serious psychological distress (9 percent compared with 2 percent, age adjusted) (table 61).

Poor children are more likely to have **untreated dental caries** than children in families with incomes above the poverty level. In 1999–2002, 33 percent of poor children 6–17 years of age had untreated dental caries compared with 13 percent of children in families with incomes at least twice the poverty level (table 85).

Between 1988–94 and 1999–2002, approximately one-quarter (24–28 percent) of adults 18–64 years of age had **untreated dental caries**, down from nearly one-half (48 percent) of adults in 1971–74 (table 85).

Mortality Trends

Life expectancy and infant mortality rates are often used to gauge the overall health of a population. Life expectancy shows a long-term upward trend and infant mortality shows a long-term downward trend.

In 2003 **life expectancy** at birth for the total population reached a record high of 77.6 years (preliminary data), up from 75.4 years in 1990 (table 27).

In 2003 the preliminary **infant mortality** rate was 6.9 infant deaths per 1,000 live births, similar to the rate in 2002 (7.0 per 1,000). In 2002 the infant mortality rate increased for the first time in more than 40 years. The rise in infant mortality in 2002 was concentrated among neonatal deaths occurring in the first week of life, due largely to an increase in the number of infants born weighing less than 750 grams (1 pound 10 1/2 ounces) (figure 27 and table 22).

Between 1950 and 2003 the age-adjusted **death rate for the total population** declined 43 percent to 831 deaths per 100,000 population (preliminary data). This reduction was

driven largely by declines in mortality from heart disease, stroke, and unintentional injury (figure 29 and table 29).

Mortality from **heart disease**, the leading cause of death, declined almost 4 percent in 2003 (preliminary data), continuing a long-term downward trend. The 2003 age-adjusted death rate for heart disease was 60 percent lower than the rate in 1950 (figure 29 and tables 29 and 31).

Mortality from **cancer**, the second leading cause of death, decreased more than 2 percent in 2003 (preliminary data), continuing the decline that began in 1990. Overall cancer age-adjusted death rates rose from 1960 to 1990 and then reversed direction (figure 29 and tables 29 and 31).

Mortality from **stroke**, the third leading cause of death, declined almost 5 percent in 2003 (preliminary data). Between 1950 and 2003, the age-adjusted death rate for stroke declined 70 percent (figure 29 and tables 29 and 31).

In 2003 mortality from **chronic lower respiratory diseases** (CLRD), the fourth leading cause of death, decreased almost 5 percent from its peak in 1999 (preliminary data). Age-adjusted death rates for CLRD generally rose between 1980 and 1999, mainly as a result of steadily increasing death rates for females, most noticeably for females age 55 years and over (figure 29 and tables 29, 31, and 41).

Mortality from **unintentional injuries**, the fifth leading cause of death, decreased more than 2 percent in 2003 (preliminary data). Age-adjusted death rates for unintentional injuries generally declined from 1950 until 1992 and then increased slightly (figure 29 and tables 29 and 31).

Disparities in Mortality

As overall death rates have declined, racial and ethnic disparities in mortality persist, but the gap in life expectancy between the black and white populations has narrowed. Disparities in mortality also persist among persons of different education levels.

Large disparities in **infant mortality** rates among **racial and ethnic groups** continue. In 2002 infant mortality rates were highest for infants of non-Hispanic black mothers (13.9 deaths per 1,000 live births), Hawaiian mothers (9.6 per 1,000), American Indian mothers (8.6 per 1,000), and Puerto Rican mothers (8.2 per 1,000); and lowest for infants of mothers of Chinese origin (3.0 per 1,000 live births) and Cuban mothers (3.7 per 1,000) (table 19).

Infant mortality increases as **mother's level of education** decreases among infants of mothers 20 years of age and over. In 2002 the mortality rate for infants of mothers with less than 12 years of education was 58 percent higher than for infants of mothers with 13 or more years of education. This disparity was more marked among non-Hispanic white infants, for whom mortality among infants of mothers with less than a high school education was more than twice that for infants of mothers with more than a high school education (table 20).

Between 1990 and 2003 **life expectancy at birth** increased 3.0 years for **males** and 1.3 years for **females** (preliminary data). The gap in life expectancy between males and females narrowed from 7.0 years in 1990 to 5.3 years in 2003 (figure 26 and table 27).

Between 1990 and 2003 **mortality from lung cancer** declined for **men** and increased for **women**. Although these trends reduced the sex differential for this cause of death, the age-adjusted death rate for lung cancer was still 74 percent higher for men than for women in 2003 (preliminary data) (table 39).

Since 1990 mortality from **chronic lower respiratory diseases** remained relatively stable for **men** while it increased for **women**. These trends reduced the gap between the sexes for this cause of death. In 1990 the age-adjusted death rate for males was more than 100 percent higher than for females. In 2003 (preliminary data) the difference between the rates had been reduced to 38 percent (table 41).

Between 1990 and 2003 **life expectancy at birth** increased more for the **black** than for the **white population**, thereby narrowing the gap in life expectancy between these two racial groups. In 1990 life expectancy at birth for the white population was 7.0 years longer than for the black population. By 2003 the difference had narrowed to 5.2 years, based on preliminary data (table 27).

Overall mortality was 30 percent higher for **black Americans** than for white Americans in 2003 (preliminary data) compared with 37 percent higher in 1990. In 2003 age-adjusted death rates for the black population exceeded those for the white population by 43 percent for **stroke**, 31 percent for **heart disease**, 23 percent for **cancer**, and almost 750 percent for **HIV disease** (table 29).

The **5-year survival rate** for black females diagnosed in 1992–2000 with breast cancer was 14 percentage points

lower than the 5-year survival rate for white females (74 percent compared with 88 percent) (table 54).

In 2003 **breast cancer mortality** for black females was 37 percent higher than for white females (preliminary data), compared with less than 15 percent higher in 1990 (based on age-adjusted death rates) (table 40).

Homicide rates among young black males 15–24 years of age and **young Hispanic males** were about 50 percent lower in 2002 than in 1992 and 1993 when homicide rates peaked for these groups. Despite these downward trends, homicide was still the leading cause of death for young black males and the second leading cause for young Hispanic males in 2002, and their homicide rates remained substantially higher than for young non-Hispanic white males (table 45).

HIV disease mortality peaked in 1995 and then fell sharply with the advent of new drug therapies. However, the decline in HIV disease mortality has slowed in recent years. Between 1999 and 2003 (preliminary data), age-adjusted death rates for HIV disease declined about 4 percent per year on average for males and were unchanged for females (table 42).

In 2002 the death rate for **motor vehicle-related injury for young American Indian males** 15–24 years of age was almost 40 percent higher and the suicide rate was almost 60 percent higher than the rates for those causes for young white males. Death rates for the American Indian population are known to be underestimated (tables 44 and 46).

In 2002 death rates for **stroke for Asian males** 45–54 and 55–64 years of age were about 15 percent higher than for white males of those ages. Since 1990, stroke mortality for Asian males and females 45–74 years of age has generally exceeded that for white males and females of those ages. Death rates for the Asian population are known to be underestimated (table 37).

Death rates vary by educational attainment. In 2002 the age-adjusted death rate for persons 25–64 years of age with fewer than 12 years of education was 2.7 times the rate for persons with at least one year of college (table 34).

Occupational Health

Improvements in workplace safety constitute a major public health achievement in the twentieth century. Despite important improvements in workplace safety practices, preventable injuries and deaths continue to occur.

In 2003 approximately 2.3 million **workplace injuries and illnesses** in the private sector involved days away from work, job transfer, or restricted duties at work for a rate of 2.6 cases per 100 full-time workers. Transportation and warehousing reported the highest injury and illness rate, 5.4 cases per 100. The next highest rates were reported by the manufacturing (3.8 per 100) and construction industries (3.6 per 100) (table 50).

In 2003, 5,043 **occupational injury deaths** occurred in the private sector or 4.7 fatal occupational injuries per 100,000 employed private sector workers. Natural resources and mining had the highest fatality rate (55.7 per 100,000). Natural resources industries include agriculture, forestry, fishing, and hunting. The next highest fatality rates were for the construction (14.3 per 100,000) and trade, transportation, and utilities industries (5.6 per 100,000) (table 49).

A total of 2,715 **pneumoconiosis deaths**, for which pneumoconiosis was either the underlying or nonunderlying cause of death, occurred in 2002, compared with 4,151 deaths in 1980. Pneumoconiosis is primarily associated with workplace exposures to dusts, including asbestos and dust in coal mines (table 48).

Health Care Utilization and Health Care Resources

Major changes continue to occur in the delivery of health care in the United States, driven in part by changes in payment policies intended to rein in rising costs and by advances in technology that have allowed more complex treatments to be performed on an outpatient basis. Use of hospital inpatient services overall has decreased, yet inpatient care is becoming more complex with more cardiac procedures performed, especially on older persons. New types of health care providers including ambulatory surgery centers and end-stage renal disease facilities have emerged that provide services previously available only in hospitals.

In 2000–2003 the most common **external causes of injury for visits to hospital emergency departments** for children and adolescents were falls, being struck by or against a person or object, and motor vehicle traffic-related injuries (figure 23).

In 2002–03 the percent of **hospital emergency department injury visits** due to falls for adults increased with age from 10–13 percent of visits for persons 18–44 years to 19 percent

for persons 45–64 years and 41 percent for persons 65 years of age and over (table 89).

In 2002–03 visit rates to **physician offices and hospital outpatient departments** among persons 18–44 years of age were twice as high for women as for men, largely due to medical care associated with female reproduction. This gender difference narrowed among middle-age adults and disappeared among persons 65 years of age and over (figure 24).

In 2003 the **hospital emergency department** visit rate for black persons was almost twice the rate for white persons (71 visits compared with 38 visits per 100 persons, age adjusted). Adults 75 years and over had a higher rate of visits to the hospital emergency department than other age groups (64 visits per 100 persons) (table 88).

In 2003, 63 percent of all **surgical operations** in community hospitals were performed on outpatients, up from 51 percent in 1990 and 16 percent in 1980 (table 101).

The long-term decline in **hospital discharge rates** and **average length of stay** appears to be over. In 2003 the hospital discharge rate was 120 discharges per 1,000 population, 5 percent higher than in 2000. In 2003 average length of stay was 4.8 days, compared with 4.9 days in 2000–2002 (data are age adjusted) (table 97).

Between 1992–93 and 2002–03 **hospital stays with at least one operation on vessels of the heart** performed on persons 75 years of age and over increased from 79 to 128 hospital stays per 10,000 persons (table 100).

Between 1996–97 and 2002–03 the rate of coronary stent insertion for adults age 45 years and over more than doubled from 22 to 49 per 10,000 population. Among adults age 75 years and over, hospitalizations that included this procedure more than tripled from 23 to 73 per 10,000 population (figure 25).

Between 1992–93 and 2002–03 **hospital stays with at least one diagnostic radiology procedure** performed on persons 18 years of age and over decreased substantially from 78 to 35 hospital stays per 10,000 persons (rates are age adjusted) (table 100).

Between 1995 and 2003 the number of **allopathic medicine graduates** was nearly 16,000 per year, and osteopathic medicine graduates increased from 1,800 to 2,600 per year (table 109).

Between 1990 and 2003 the number of **community hospital beds** declined from about 927,000 to 813,000. In 2003 community hospital occupancy increased to 66 percent from a low of 63 percent in 1995 (table 112).

Between 1990 and 2002, the overall number of **inpatient mental health beds** in the United States declined by 22 percent. In VA medical centers the number of mental health beds declined by 55 percent, in State and county mental hospitals and private psychiatric hospitals the decline was more than 40 percent, and in psychiatric units of non-Federal general hospitals the decline was 25 percent (table 113).

In 2003 there were 6,900 Medicare-certified **home health agencies**, down from 10,800 in 1997. During this period, the number of Medicare-certified **hospices** remained stable at about 2,300 (table 117).

In 2003 there were nearly 1.8 million **nursing home beds** in facilities certified for use by Medicare and Medicaid beneficiaries. Between 1995 and 2003 nursing home bed occupancy in those facilities was relatively stable, estimated at 83 percent in 2003 (table 116).

Preventive Health Care

Preventive health services help reduce morbidity and mortality from disease. Use of several different types of preventive services has been increasing, but disparities persist in use of preventive health care by race, ethnicity, and family income.

The percent of mothers receiving **prenatal care** in the first trimester of pregnancy has continued to edge upward from 76 percent in 1990 to 84 percent in 2003. Although increases occurred for all racial and ethnic groups, in 2003 the percent of mothers with early prenatal care still varied substantially, from 71 percent for American Indian mothers to 92 percent for mothers of Cuban origin (table 7).

In 2003, 81 percent of children 19–35 months of age received the **combined vaccination** series of four doses of DTaP (diphtheria-tetanus-acellular pertussis) vaccine, three doses of polio vaccine, one dose of MMR (measles-mumps-rubella vaccine), and three doses of Hib (Haemophilus influenzae type b) vaccine. Children living below the poverty threshold were less likely to have received the combined vaccination series than were children living at or above poverty (76 percent compared with 83 percent) (table 77).

In 2003, 66 percent of noninstitutionalized adults 65 years of age and over reported an **influenza vaccination** within the past year, approximately the same percent since 1999 and more than double the percent in 1989. In 2002 and 2003 the percent of older adults ever having received a **pneumococcal vaccine** was 56 percent, up sharply from 14 percent in 1989 (table 76).

In 2003, 70 percent of women age 40 years and over had a **mammogram** within the past 2 years. Poor women living below the poverty threshold were less likely to have a recent mammogram (55 percent) than were women in families with incomes at least twice the poverty threshold (74 percent) (figure 21 and table 86).

In 2003, 79 percent of women age 18 years and over reported a **Pap smear** within the past 3 years. Among women 25–44 years of age, Pap smear use was lowest for women with less than a high school education (72 percent) and highest for women with at least some college education (91 percent) (figure 22 and table 87).

Access to Care

People need ready access to care both for preventive care and for prompt treatment of illness and injuries. Health insurance coverage is a major determinant of access to care. Other indicators of access include having a usual source of health care and having a recent contact with a provider of health care.

Between 1994 and 2003, the percent of the **population under 65 years of age with no health insurance coverage** (public or private) ranged between 16.1 and 17.5 percent. Among the under 65 population, the poor and near poor (those with family incomes less than 200 percent of poverty) were much more likely than the nonpoor to be uninsured (figures 6 and 7).

The likelihood of being uninsured varies substantially among the **States**. In 2001–03 the average percent of the population with **no health insurance coverage** ranged from 8 percent in Minnesota to 25 percent in Texas (table 156).

In 2003, 10 percent of **children** under 18 years of age had **no health insurance coverage**. Between 2000 and 2003 among children in families with income just above the poverty level (1–1.5 times poverty), the percent uninsured dropped from 25 to 16 percent. However, children in low-income

families remain substantially more likely than children in higher-income families to lack coverage (table 134).

Persons of **Hispanic origin and American Indians** under 65 years of age are more likely to have **no health insurance coverage** than are those in other racial and ethnic groups. In 2003 among the Hispanic-origin population, persons of Mexican origin were the most likely to lack health insurance coverage (38 percent). Non-Hispanic white persons were the least likely to lack coverage (12 percent) (figure 7 and table 134).

In 2003 **uninsured persons** under 65 years of age were about 3 times as likely as insured persons to have had **no health care visits** within the past 12 months (38 percent compared with 13 percent, age adjusted) (table 75).

In 2002–03, 12 percent of **children** under 18 years of age had **no health care visit** to a doctor or clinic within the past 12 months. Uninsured children were more than 3 times as likely as insured children to lack a recent visit (32 percent compared with 10 percent) (table 79).

Six percent of **children** under 18 years of age had **no usual source of health care** in 2002–03. Uninsured children were nearly 10 times as likely as insured children to lack a usual source of care (29 percent compared with 3 percent) (table 80).

Twenty-seven percent of young **children** under 6 years of age had an **emergency department (ED) visit** within the past 12 months in 2003. Young children living below the poverty level were more likely than those in families with income more than twice poverty to have had an ED visit within the past 12 months (34 percent compared with 24 percent) (table 81).

Seventeen percent of **working-age adults** 18–64 years of age had **no usual source of health care** in 2002–03. Working-age males were nearly twice as likely as working-age females to lack a usual source of care (22 percent compared with 12 percent, age adjusted) (table 82).

In 2003, 75 percent of **children** 2–17 years of age had a **dental visit** in the past year. Children living below or near the poverty level were less likely than children living in families with income more than twice poverty to have had a recent dental visit (66–67 percent compared with 81 percent) (table 84).

Use of hospital inpatient care is greater among the poor than among the nonpoor whose family income is at least twice the poverty level. In 2003 among persons under 65 years of age, the hospital discharge rate for the poor was nearly twice the rate for nonpoor (150 and 82 per 1,000 population, age adjusted) (table 96).

Health Care Expenditures and Payors

After double-digit annual growth in national health expenditures in the 1980s, the rate of growth slowed during the 1990s. In the current decade the rate of growth edged up again and continued to accelerate until 2002. The rate of growth was slower in 2003 than in the previous year. The United States continues to spend more on health than any other industrialized country. Major payors for health care include public programs such as Medicare and Medicaid, and private health insurers such as health maintenance organizations and other managed care entities.

In 2003 **national health care expenditures** in the United States totaled \$1.7 trillion, a 7.7 percent increase compared with about 9 percent per year increases in 2001 and 2002. In the mid-1990s annual growth had slowed somewhat, following an average annual growth rate of 11 percent during the 1980s (table 119).

The United States spends a larger **share of the gross domestic product (GDP) on health** than does any other major industrialized country. In 2002 the United States devoted 15 percent of the GDP to health compared with 11 percent each in Switzerland and Germany and nearly 10 percent in Iceland, France, Canada, Norway, and Greece, countries with the next highest shares (table 118).

In 2003 national health expenditures grew 7.7 percent, compared with 4.9 percent growth in the gross domestic product (GDP). **Health expenditures as a percent of the GDP** increased to 15.3 percent in 2003, up from 14.9 percent in 2002 (figure 8 and table 119).

In 2004, the increase in the medical care component of the **Consumer Price Index (CPI)** was 4.4 percent, continuing to outpace overall inflation (2.7 percent). The CPI for hospital services showed the greatest price increase (6.0 percent) compared with other components of medical care (table 120).

Expenditures by Type of Care and Source of Funds

In recent years expenditures for prescription drugs have grown at a faster rate than any other type of health expenditure. Hospital care, however, continues to account for the largest share of health care spending.

Expenditures for hospital care accounted for 31 percent of all national health expenditures in 2003. Physician services accounted for 22 percent of the total in 2003, prescription drugs for 11 percent, and nursing home care for 7 percent (table 122).

Between 2000 and 2003 **community hospital expenses** increased at an average annual rate of 8 percent compared with a 5-percent increase between 1995 and 2000 (table 129).

Between 1995 and 2003 the average annual rate of increase for **prescription drug expenditures** was 14 percent, higher than for any other health expenditure (table 122).

Prescription drug expenditures increased 11 percent in 2003 and 15–16 percent in 2001 and 2002. Prescription drugs posted a 3-percent increase in the Consumer Price Index in 2003 and 2004 and a 5-percent price increase in 2001 and 2002 (tables 120 and 122).

In 2003, 46 percent of **prescription drug expenditures** were paid by private health insurance (up from 24 percent in 1990), 30 percent by out-of-pocket payments (down from 59 percent in 1990), and 19 percent by Medicaid. Although Medicare is the Federal program that funds health care for persons age 65 years and over, and older Americans are the highest per capita consumers of prescription drugs, Medicare paid less than 2 percent of prescription drug expenses in 2003 (table 123).

In 2002, 91 percent of persons age 65 years and over in the civilian noninstitutionalized population had a **prescribed medicine expense** compared with 61 percent of younger people. Women 65 years of age and over averaged \$920 out-of-pocket for prescribed medicine compared with \$674 for men in 2002. Among those under 65 years of age, out-of-pocket expenses averaged \$265 for women and \$212 for men in 2002 (table 124).

In 2002, 96 percent of **persons age 65 years and over** in the civilian noninstitutionalized population reported **medical expenses** that averaged about \$7,800 per person with expense. Seventeen percent of expenses were paid

out-of-pocket, 14 percent by private insurance, and 66 percent by public programs (mainly Medicare and Medicaid) (tables 124 and 125).

The burden of **out-of-pocket expenses** for health care varies considerably by age. In 2002 about two-fifths of those 65 years of age and over with health care expenses paid \$1,000 or more out-of-pocket, compared with one-quarter of those 45–64 years of age, and less than one-ninth of adults 18–44 years of age (table 126).

In 2003, 33 percent of **personal health care expenditures** were paid by the Federal Government and 11 percent by State and local government; private health insurance paid 36 percent and consumers paid 16 percent out-of-pocket (figure 9 and table 123).

In 2003 the major **sources of funds for hospital care** were Medicare (30 percent) and private health insurance (34 percent). **Physician services** were also primarily funded by private health insurance (one-half) and Medicare (one-fifth). In contrast, **nursing home care** was financed primarily by Medicaid (almost one-half) and out-of-pocket payments (more than one-quarter). The Medicare share of nursing home expenditures has risen from 3 percent in 1990 to 12 percent in 2003 (table 123).

Publicly Funded Health Programs

The two major publicly funded health programs are Medicare and Medicaid. Medicare is funded through the Federal Government and covers the health care of persons 65 years of age and over and disabled persons. Medicaid is jointly funded by the Federal and State Governments to provide health care for certain groups of low-income persons. In recent years, Medicaid has expanded to cover a greater proportion of the low-income adult population—and the State Children's Health Insurance Program (SCHIP) now covers many low-income children. Medicaid benefits and eligibility vary by State.

In 2004 the **Medicare** program had 42 million enrollees and expenditures of \$309 billion (table 139).

In 2004 **hospital insurance (HI)** accounted for 55 percent of **Medicare** expenditures. Expenditures for home health agency care continued to hover around 3 percent of HI expenditures, down from 14 percent in 1995. Expenditures for hospice care nearly doubled from 2 to 4 percent of HI expenditures between 2000 and 2004 (table 139).

In 2004 **supplementary medical insurance** (SMI) or Part B of Medicare accounted for 45 percent of **Medicare** expenditures. It typically covers outpatient health expenses including physician fees. Fourteen percent of SMI expenditures in 2004 were payments to managed care organizations, down from 20–22 percent in 1999–2000. Nearly 40 percent of the \$138 billion SMI expenditures in 2004 went to physicians under the physician fee schedule (table 139).

Of the 35 million **Medicare enrollees in the fee-for-service program** in 2002, 11 percent were 85 years of age and over and 16 percent were disability beneficiaries under 65 years of age. Among fee-for-service Medicare enrollees age 65 years and over, payments ranged from an average of \$4,600 per year for enrollees age 65–74 years to \$9,000 for those 85 years and over (table 140).

In 2001, 80 percent of Medicare beneficiaries were non-Hispanic white, 9 percent were non-Hispanic black, and 7 percent were Hispanic. One-fifth of Hispanic beneficiaries and one-quarter of non-Hispanic black beneficiaries were persons under 65 years of age entitled to **Medicare through disability**, compared with 12 percent of non-Hispanic white beneficiaries (table 141).

In 2002 **Medicare payments per fee-for-service enrollee** varied by State from less than \$4,500 in Hawaii and South Dakota to \$7,200 or more in New Jersey, the District of Columbia, Louisiana, Maryland, and New York (table 153).

In 2001 **Medicaid** paid vendors \$186 billion on behalf of 46 million recipients (table 142).

In 2003 **Medicaid enrollment** increased to 12.3 percent of the noninstitutionalized population under 65 years of age, up from 9.5 percent in 2000. In 2003 among children under 18 years of age, 26 percent were covered by Medicaid or the State Children's Health Insurance Program, a 6 percentage point increase since 2000 (table 133).

In 2001 children under the age of 21 years accounted for 46 percent of **Medicaid recipients** but only 16 percent of expenditures. Aged, blind, and disabled persons accounted for nearly one-quarter of recipients and nearly 70 percent of expenditures (table 142).

In 2001, 20 percent of **Medicaid payments** went to nursing facilities, 14 percent to inpatient general hospitals, 16 percent to capitated payment services, and 13 percent to prescribed drugs (table 143).

In 2001 **Medicaid payments per recipient varied by State** from less than \$3,000 in California, Tennessee, Georgia, and Washington to more than \$7,000 in New York and New Hampshire. On average, payments were lower in the Southeast, Southwest, and Far West States than in the New England and Mideast States (table 154).

Private Health Insurance

Almost 70 percent of the population under 65 years of age has private health insurance, most of which is obtained through the workplace. In private industry, about 7 percent of employees' total compensation is devoted to health insurance. This share has increased in recent years. Most health insurance is now provided through some form of managed care organization, including health maintenance organizations (HMOs), preferred provider organizations (PPOs), and point-of-service plans (POSs). Less than one-quarter of all persons in the United States were enrolled in HMOs in 2004. HMO enrollment peaked in 1999 and has declined slowly since then.

In 2002 and 2003 the proportion of the population under 65 years of age with **private health insurance** was 69 percent. Between 1995 and 2001 the proportion had fluctuated between 71 and 73 percent after declining from 77 percent in 1984 (figure 6 and table 132).

Between 2001 and 2003 the proportion of the population under 65 years of age with **health insurance obtained through the workplace** (a current or former employer or union) declined from 67 to 63 percent. This decline disproportionately affected the poor and near poor and Hispanic persons (table 132).

In 2005 **private employers** paid an estimated 6.8 percent of total compensation for health insurance, or \$1.64 for each employee-hour worked. The corresponding estimates for State and local governments were 10.2 percent and \$3.63, based on March 2005 reporting (table 128).

Enrollment in HMOs totaled 69 million persons or 23 percent of the U.S. population in 2004. HMO enrollment varied from 16–19 percent in the South and Midwest to 30–34 percent in the Northeast and West. HMO enrollment increased steadily through the 1990s but has declined since then. Between 1998 and 2004 the number of HMO plans decreased from 651 to 412 plans (table 137).

Special Feature: Adults 55–64 Years of Age

The population 55–64 years of age is a rapidly growing segment of the adult population. As persons in this group age and begin to develop health problems, they do not have the guarantee of health insurance coverage that Medicare now offers to almost all older adults age 65 and over, and employer-sponsored post-retirement health insurance offers have been declining. While many Americans age 55–64 years are relatively well off both physically and financially, other Americans in this age group face a burden from chronic and debilitating diseases, poverty, lack of health insurance, and reduced access to health care.

The **population 55–64 years of age** is a rapidly growing segment of the adult population. In 2004 this age group numbered about 29 million persons. Over the next 10-year period, the 55–64 age group will increase by 11 million persons to an estimated 40 million persons (figure 30).

In 2002–03 more than one-half of adults 55–64 years of age were **employed**. Non-Hispanic white men and Hispanic men were more likely to be working (about 65 percent) than non-Hispanic black men (57 percent). Among women, a little over one-half of non-Hispanic white women were working compared with 46 percent of non-Hispanic black women and 41 percent of Hispanic women (figure 31).

Non-Hispanic black adults age 55–64 years were more likely than other racial and ethnic groups to report being **unemployed because of disability**. In 2002–03, 22 percent of non-Hispanic black adults age 55–64 years were unemployed due to disability compared with 15 percent of Hispanic and 10 percent of non-Hispanic white adults in this age group (figure 31).

In 2003, more than one-fifth of adults 55–64 years of age had income below 200 percent of **poverty** compared with almost two-fifths of older persons (figures 5 and 32).

In 2002–03, 83 percent of **married** adults 55–64 years of age were covered by **private health insurance** compared with about 60 percent of widowed, separated, divorced, and single adults (figure 33).

Between 1988–94 and 1999–2002, the percent of men age 55–64 years who had one or more of the **cardiovascular risk factors** of obesity, high cholesterol, and hypertension increased from 64 to 72 percent (figure 34).

In 2002–03, persons age 55–64 years with private health insurance were about twice as likely to report **medical care visits** in the past 12 months to specialist physicians, eye doctors, and physical or occupational therapists compared with those without insurance. Those with private insurance were almost 50 percent more likely than the uninsured to report a recent visit to a general physician (family medicine practitioner, internist, or general practitioner) (figure 35).

Between 1995–96 and 2002–03 the rate of **cholesterol-lowering drugs** prescribed during physician and hospital outpatient department visits among men 55–64 years of age almost tripled from 20 to 57 drugs per 100 population and among women more than tripled from 15 to 49 drugs per 100 population (figure 36).

In 2002 the out-of-pocket **prescribed medicine expense** among adults 55–64 years of age was \$425 compared with \$286 in 1997 (2002 dollars). Women age 55–64 years had an average out-of-pocket prescribed medicine expense of \$495 in 2002 compared with \$351 for men in this age group (figure 37).